

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-31 (Canceled)

32. (Currently Amended): A method for determining if the amount of toner required to render a print job using a print engine at an associated printing location is available at the print engine at the associated printing location wherein prior information about a toner level of a toner cartridge from which toner is supplied to the rendering operation at the print engine at the associated location is stored in a toner level register as a toner level value, comprising the steps of:

accumulating as an accumulated image value in a first register an accumulator toner values, expressed as an incremental value ranging from zero to a maximum value, of substantially all the pixels in a rasterized image prior to sending the rasterized image to the printing location;

decrementing the current toner level value in the toner level register by the accumulated image value for the print engine at the associated printing location and maintaining this value, if a comparison of the accumulated image value with the current toner level value for the print engine at the associated printing location indicates that the current toner level minus the accumulated image value in the first register is less greater than or equal to the a minimum toner level value in the toner level register associated with the print engine at the associated printer location; and

sending the rasterized image to the print engine at the associated printing location for rendering only if the decremented toner level value associated therewith has been decremented determined to greater than the minimum toner level.

33. (Currently Amended) The method of Claim 32, further comprising the step of:

sending the print job to an alternative print engine at an alternative associated printing location for rendering if the accumulated image value is greater than the current toner level value associated with the print engine at the associated printing location minus the minimum toner level.

34. (Currently Amended) The method of Claim 32, wherein the step of accumulating

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comprises the steps of:

expressing the toner value of each pixel in the rasterized image as one of a plurality of incremental units having values from zero to maximum toner usage for a pixel; and

5 accumulating the toner values for all of the non-zero-valued pixels in the rasterized image in the first-register accumulator.

35. (Currently Amended): The method of Claim 34, wherein the step of decrementing comprises the steps of:

comparing the value in the first-register accumulator with the current toner level value in the toner level register for the print engine at the associated printing location; and

5 subtracting the accumulated value in the first-register accumulator from the current toner level value in the toner level register for the print engine at the associated print location if it is less greater than or equal to the value in the current toner level value in the toner level register for the print engine at the associated printing location minus the minimum toner level.

36. (Currently Amended) The method of Claim 32, wherein the step of accumulating comprises the steps of:

determining an average pixel value for the pixels of the rasterized image;

5 defining the toner required for rendering the rasterized image as a percentage of a maximum toner usage page wherein each pixel in a rasterized image for a maximum toner usage page has a maximum value; and

entering the defined toner required into the accumulator ~~first-register~~ as the percentage of the maximum toner usage page.

37. (Currently Amended) The method of Claim 36, wherein the step of decrementing comprises the steps of:

5 comparing the value in the first-register accumulator with the current toner level value in the toner level register for the print engine at the associated printing location which toner level value represents printing pages at maximum toner usage; and

subtracting the value in the first-register accumulator if it is less greater than or equal

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to the current toner level value in the toner level register for the print engine at the associated printing location minus the minimum toner level.

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Claim 38 (Currently Amended): The method of Claim 32 wherein the print job is comprised of a plurality of pages, each page providing a separate rasterized page image and wherein the step of accumulating comprises the step of accumulating as the accumulated image value in the first register accumulator toner values for all of the rasterized page images as a single print job.

Claim 39 (Previously Presented): The method of claim 38, wherein the step of sending the rasterized image to the print engine at the associated printing location for rendering comprises sending the entire print job comprised of the rasterized page images to the print engine at the associated printing location for rendering.

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